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REMARKS

This Amendment is responsive to the Office Action identified above, and is further responsive in any manner indicated below.

PENDING CLAIMS

Original Claims 1-16 were cancelled (without prejudice or disclaimer) in the Preliminary Amendment filed in the present application on 5 December 2003, and new Claims 17-25 were submitted for consideration and examination. <u>Unrelated to any prior art, scope or rejection</u>, appropriate claims have been amended in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment, and are simply clarified claims in which Applicant is interested. At entry of this paper, Claims 17-25 remain pending for further consideration and examination.

CLAIMS ALLOWED/AMENDED TO BE ALLOWABLE

Claims 17-19 are allowed, as indicated at Item 5 on page 5 of the Office Action. Applicant and the undersigned thank the Examiner for such indication of allowable subject matter.

At Item 6 on page 5 of the Action, Claims 23-25 are indicated as being allowable if amended to overcome the typographical error in Claim 23. Claim 23 has been so corrected, and accordingly, Claims 23-25 also are in condition for allowance. Reconsideration and withdrawal of the objection to Claims 23-25 are respectfully requested.

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REJECTION UNDER 35 USC §103

All 35 USC §103 rejections (*i.e.*, the 35 USC §103 rejection of Claims 20 and

21 as being unpatentable over Liou *et al.* (EP 0 780 776 A1) in view of Kiyama (JP

10-126721); and the §103 rejection of Claim 22 as being unpatentable over Liou *et*

al. in view of Kiyama and further in view of Tada *et al.* (US 5,572,728 A)) are

respectfully traversed.

All descriptions of Applicant's disclosed and claimed invention, and all

descriptions and rebuttal arguments regarding the applied prior art, as previously

submitted by Applicant in any form, are repeated and incorporated herein by

reference. Further, all Office Action statements regarding the prior art rejections are

respectfully traversed.

Independent Claim 20 (and claims dependent therefrom) recited

features/limitations of: "checking positions of the list where the detection time

interval between two adjacent static images in the list is equal to or bigger than a

predetermined value." By having a "predetermined value" and checking only

positions where the "detection time interval between two adjacent static images in

the list is equal to or bigger than" the predetermined value, Applicant's Claim 20

arrangement is able to effectively pass over "flicker scenes" which have short

detection time intervals between adjacent static images. Liou *et al.* (the primary

applied reference) would not have disclosed or suggested the mentioned

"predetermined value" and checking only positions where the "detection time interval

between two adjacent static images in the list is equal to or bigger than" the

predetermined value, *i.e.*, the Liou *et al.* arrangement does not deal with flicker

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scenes as does Applicant's invention. While Office Action comments point to Liou *et al.*'s "page 17, lines 6-10; page 10, lines 9-28" disclosure portions, Applicant and the undersigned cannot read such of Applicant's original features/limitations from the pointed-to or any other Liou *et al.* portions, and accordingly, it is respectfully submitted that Liou *et al.* does not adequately support the rejection.

Beyond the above, independent Claim 20 (and claims dependent therefrom) have been further clarified with the features/limitations of: "whereas passing over positions of the list where the detection time interval between two adjacent static images in the list is less than a predetermined value." Such added features/limitations simply compliment the above-discussed "checking" features/limitations, *i.e.*, are directed to effectively passing over "flicker scenes" which have short detection time intervals between adjacent static images. Again, Liou *et al.* (the primary applied reference) would not have disclosed or suggested the mentioned added features/limitations.

None of the other applied references cure the major deficiency mentioned above, and accordingly, it is respectfully submitted that no combination of the applied references would have disclosed, resulted in, or suggested, Applicant's disclosed and claimed invention.

As additional arguments, the following remarks are respectfully submitted from Applicant's foreign representative in support of traversal of the rejection and patentability of Applicant's claims.

Liou *et al.* is for detecting a cut in a video. The cut corresponds to a shot change frame. In the video, the image is always moving and the moving speed or the moving characteristic varies depending on the static shot types as shown in

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page 10, lines 9-28 (see page 10, lines 3 to 8). The description of page 10, lines 9

to 28 is for explaining the cut detection algorithm. Liou *et al.* provides a method of

correctly detecting a cut regardless of the shot types.

On page 17, lines 6-10 in Liou *et al.*, the time trend estimation is explained. It

is for detecting a cut. The respective shot types have the inter-frame difference

trend. If the inter-frame difference is largely deviated from the trend, the

corresponding frame is marked as a possible shot change frame candidate. See

Fig. 14 and page 17, lines 48 and 49.

Accordingly, the descriptions of page 10, lines 9-28 and page 17, lines 6-10

correspond to the step for detecting a shot change frame.

The present invention in Claim 20 shows the process after detecting shot

change frames. If the time interval of the shot changes is very short, it may be a

blinking light scene. The steps of registering, checking, dividing, displaying in claim

20 is for finding such defective scene. Those steps corresponds to steps 204, 207

and 209 of Fig. 2. If the interval between the shot changes is longer than the

predetermined time, the two shot changes are classified into the different groups. If

the interval is shorter than the predetermined time, the shot changes are classified

into the same group. The images are displayed for each group. The blinking light

scene is the latter case and the alternate light-on light-off images are displayed as

one group. The user (manager) can easily find the blinking light scene at a glance.

Attached is a SKETCH for the convenience of the Examiner in example of Claim 20.

Liou *et al.* provides a method for correctly detecting a shot change frame in

various shot types, while the present invention provides a method for classifying a

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scene into different groups after detecting shot change frames. Liou *et al.* does not show the steps or process after detecting shot changes.

Kiyama generates a dynamic image retrieving information which includes data on which position in the screen the change of the dynamic image takes place (Abstract, paragraph [0003]). The interframe difference of the histogram is displayed along a series of dynamic images (abstract, paragraph [0016], Fig. 4). Kiyama also does not disclose the grouping or the display images for each group. Therefore, the present invention is different from the cited references in after detection process and grouping schemes, and the features/limitations of Claim 20 are not taught or suggested.

Claims 21 and 22 depend from Claim 20. Accordingly, Claims 20-22 are allowable over the applied prior art.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a §103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such §103 rejection, and express written allowance of all of the §103 rejected claims, are respectfully requested.

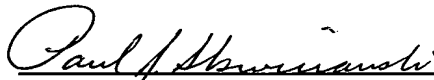## EXAMINER INVITED TO TELEPHONE

The Examiner is invited to telephone the undersigned at the local D.C. area number 703-312-6600, to discuss an Examiner's Amendment or other suggested action for accelerating prosecution and moving the present application to allowance.

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CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

This Amendment is being submitted within the shortened statutory period for response set by the Office Action mailed 16 September 2004, and no Petition is required. To whatever other extent is actually appropriate and necessary, Applicant respectfully petitions for an extension of time under 37 CFR §1.136. No additional fees are required for entry of this paper. Please charge any actual and appropriate deficiency in fees to ATS&K Deposit Account No. 01-2135 (as No. 500.37490CX1).

Respectfully submitted,

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Attachment:
SKETCH